

CLAIMS

What is claimed is:

- 1 1. A method for determining the usage of space in a database, comprising:
 - 2 storing, at a first database server, a first set of space usage data that reflects the
 - 3 amount of free space associated with the database;
 - 4 retrieving, from one or more second database servers, a second set of space usage
 - 5 data that reflects the amount of free space associated with the database;
 - 6 updating the first set of space usage data with the second set of space usage data; and
 - 7 evaluating the usage of space in the database based on the updated first set of space
 - 8 usage data.
- 1 2. The method of Claim 1, wherein the first set of space usage data and the second set of
- 2 space usage data each reflect the amount of free space in one or more tablespaces that
- 3 are each associated with the database.
- 1 3. The method of Claim 1, wherein the first set of space usage data and the second set of
- 2 space usage data each reflect the amount of free space in one or more files that are
- 3 each associated with the database.
- 1 4. The method of Claim 1, wherein the first set of space usage data is updated based on
- 2 changes made to the database by the first database server, and wherein the second set
- 3 of space usage data is updated based on changes made to the database by the one or
- 4 more second database servers.
- 1 5. The method of Claim 1, wherein the step of storing the first set of space usage data
- 2 comprises:

3 storing a subset of the first set of space usage data, wherein each subset is associated
4 with a transaction initiated by the first database server that is performed on the
5 database.

1 6. The method of Claim 1, wherein the step of storing the first set of space usage data
2 comprises:

3 examining the database to generate the first set of space usage data.

1 7. The method of Claim 1, wherein the step of retrieving the second set of space usage
2 data comprises:

3 determining that a configurable period of time has expired, wherein the configurable
4 period of time indicates an amount of time to wait before retrieving the second
5 set of space usage data from the one or more second clients

1 8. The method of Claim 1, wherein the step of evaluating the usage of space in the
2 database comprises:

3 determining if a tablespace in the database has exceeded a configurable threshold.

1 9. The method of Claim 1, further comprising:

2 raising an alert that indicates that the usage of space in a tablespace in the database
3 has exceeded a configurable threshold.

1 10. The method of Claim 1, further comprising:

2 in response to the step of evaluating the usage of space in the database, scheduling
3 space reclamation for the database.

1 11. The method of Claim 1, wherein the database is in a distributed cluster of databases.

- 1 12. The method of Claim 1, wherein the database is in a grid of databases.
- 1 13. The method of Claim 1, wherein the steps of retrieving, updating, and evaluating may
2 be repeated in sequence after a configurable amount of time lapses since the step of
3 evaluating was last performed.
- 1 14. A computer-readable medium carrying one or more sequences of instructions for
2 determining the usage of space in a database, wherein execution of the one or more
3 sequences of instructions by one or more processors causes the one or more
4 processors to perform the steps of:
5 storing, at a first database server, a first set of space usage data that reflects the
6 amount of free space associated with the database;
7 retrieving, from one or more second database servers, a second set of space usage
8 data that reflects the amount of free space associated with the database;
9 updating the first set of space usage data with the second set of space usage data; and
10 evaluating the usage of space in the database based on the updated first set of space
11 usage data.
- 1 15. The computer-readable medium of Claim 14, wherein the first set of space usage data
2 and the second set of space usage data each reflect the amount of free space in one or
3 more tablespaces that are each associated with the database.
- 1 16. The computer-readable medium of Claim 14, wherein the first set of space usage data
2 and the second set of space usage data each reflect the amount of free space in one or
3 more files that are each associated with the database.

- 1 17. The computer-readable medium of Claim 14, wherein the first set of space usage data
- 2 is updated based on changes made to the database by the first database server, and
- 3 wherein the second set of space usage data is updated based on changes made to the
- 4 database by the one or more second database servers.
- 1 18. The computer-readable medium of Claim 14, wherein the step of storing the first set
- 2 of space usage data comprises:
 - 3 storing a subset of the first set of space usage data, wherein each subset is associated
 - 4 with a transaction initiated by the first database server that is performed on the
 - 5 database.
- 1 19. The computer-readable medium of Claim 14, wherein the step of storing the first set
- 2 of space usage data comprises:
 - 3 examining the database to generate the first set of space usage data.
- 1 20. The computer-readable medium of Claim 14, wherein the step of retrieving the
- 2 second set of space usage data comprises:
 - 3 determining that a configurable period of time has expired, wherein the configurable
 - 4 period of time indicates an amount of time to wait before retrieving the second
 - 5 set of space usage data from the one or more second clients
- 1 21. The computer-readable medium of Claim 14, wherein the step of evaluating the usage
- 2 of space in the database comprises:
 - 3 determining if a tablespace in the database has exceeded a configurable threshold.

- 1 22. The computer-readable medium of Claim 14, wherein execution of the one or more
- 2 sequences of instructions by the one or more processors causes the one or more
- 3 processors to perform the additional step of:
- 4 raising an alert that indicates that the usage of space in a tablespace in the database
- 5 has exceeded a configurable threshold.
- 1 23. The computer-readable medium of Claim 14, wherein execution of the one or more
- 2 sequences of instructions by the one or more processors causes the one or more
- 3 processors to perform the additional step of:
- 4 in response to the step of evaluating the usage of space in the database, scheduling
- 5 space reclamation for the database.
- 1 24. The computer-readable medium of Claim 14, wherein the database is in a distributed
- 2 cluster of databases.
- 1 25. The computer-readable medium of Claim 14, wherein the database is in a grid of
- 2 databases.
- 1 26. The computer-readable medium of Claim 14, wherein the steps of retrieving,
- 2 updating, and evaluating may be repeated in sequence after a configurable amount of
- 3 time lapses since the step of evaluating was last performed.